

What Is Claimed Is:

1. A method for arranging information from information sources which are connected via network, comprising the steps of:

5 periodically circulating a plurality of registered information sources to collect information;

selecting words for topical elements from the collected information;

10 clustering the selected set of words; and

15 based on the result of the clustering, displaying information elements in each cluster based on the time base, and at the same time displaying main keywords from among a set of words in each cluster as representative keywords of that cluster.

20 2. The method according to claim 1, wherein said displaying step comprises the step of displaying supplementary information based on keywords included in a text part of the information elements in each cluster.

25 3. The method according to claim 2, wherein when a plurality of words can be degenerated to one thing, further comprising the step of:

making the degenerated thing a degenerated expression; and

30 said displaying step includes the step of displaying the degenerated expression which has newly appeared in each cluster as supplementary information.

4. The method according to claim 1, wherein said selecting step comprises the step of selecting the words which have newly appeared with highly weighting.

5 5. The method according to claim 1, wherein said selecting step comprises the step of, for a specific information source where a specific word is selected, selecting words for topical elements in view of supports by the word from other information sources among said plurality of information sources.

10 6. A method for arranging information, comprising the steps of:

15 accepting a registration of information sources to acquire information therefrom and words a user has interest in from the user;

20 periodically circulating the registered information sources to acquire information elements;

selecting words the user has interest in among the acquired information elements with increasing a significance of said words;

clustering a set of information elements including the selected words; and

25 displaying the information elements clustered along with the result of the clustering.

7. The method according to claim 6, further comprising the steps of:

30 determining a degree of interest of the user in the individual information sources; and

selecting words which have appeared in the information sources with a high degree of interest, with increasing a significance of said words.

5 8. A method for arranging information, comprising the steps of:

registering a plurality of sites to acquire information therefrom;

10 periodically circulating the plurality of registered sites;

investigating a change of contents to collect information from the plurality of circulated sites; and

extracting an important topic in view of supports by the word from other sites.

15 9. The method according to claim 8, further comprising the steps of:

clustering the extracted information elements having the important topic; and

20 displaying the information elements obtained along with the result of the clustering.

25 10. The method according to claim 8, further comprising the steps of:

calculating an amount of topics which individual sites have provided based on the number of extracted information elements; and

30 accumulating an index showing a topic supply capacity of the sites based on the calculated amount of topics.

11. An information processing apparatus, comprising:
specification means for specifying a plurality of
sites to be circulated;

5 storage means for storing the plurality of
specified sites;

information collection means for periodically
circulating the plurality of stored sites to collect
information;

10 word selection means for selecting words for
topical elements from the collected information;

clustering means for clustering the selected set
of words; and

15 output means for, based on the result of the
clustering, outputting information elements in each
cluster and keywords in a set of words in each cluster.

20 12. The information processing apparatus according to
claim 11; wherein the output means outputs the information
elements in each cluster in time series, at the same time
outputs supplementary information with keywords included
in a text part of the information elements.

25 13. The information processing apparatus according to
claim 11, wherein the output means not only displays on a
display device, but also outputs electronic information on
a terminal connected via a network.

14. An information processing apparatus, comprising:
registration accept means for accepting a registration of information sources to acquire information therefrom and words a user has interest in from the user;

5 circulation means for periodically circulating the accepted information sources to acquire information elements;

10 selection means for selecting words the user has interest in among the acquired information elements with increasing a significance;

clustering means for clustering a set of information elements including the selected words; and

15 display means for displaying the information elements clustered along with the result of the clustering.

15. The information processing apparatus according to claim 14, further comprising:

20 setting means for setting a high significance for information sources which the user has registered, or where a corresponding information element has been selected by the user in the past; and

25 said selection means selects words which have appeared in the information sources where a high significance is set by said setting means, with increasing a significance of said words.

30 16. A storage media for storing a program readable by computer input means and executed by a computer, the program comprising:

process for periodically circulating a plurality of registered information sources to collect information;

process for selecting words for topical elements from the collected information;

5 process for clustering the selected set of words; and

10 process for, based on the result of the clustering, displaying information elements in each cluster based on the time base, at the same time displaying predetermined keywords from among a set of words in each cluster.

15 17. The storage media according to claim 16, the program further comprising a process of displaying supplementary information based on keywords included in a text part of the information elements in each cluster, using a degenerated expression that newly appeared in each cluster.

20 18. A storage media for storing a program readable by computer input means and executed by a computer, the program comprising:

process for registering a plurality of sites to acquire information therefrom;

25 process for periodically circulating the plurality of registered sites;

process for investigating a change of contents to collect information from the plurality of circulated sites; and

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extracting an important topic in view of supports by the word from other sites.

19. A program transmission apparatus including a storage means for storing a program executed by a computer and a transmission means for transmitting the program stored in said storage means to a user terminal via the Internet, the program comprising:

process for periodically circulating a plurality of registered information sources to collect information;

process for selecting words for topical elements from the collected information;

process for clustering the selected set of words; and

process for, based on the result of the clustering, displaying information elements in each cluster based on the time base, at the same time displaying predetermined keywords from among a set of words in each cluster.